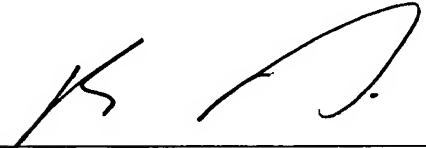




<b>TRANSMITTAL OF APPEAL BRIEF</b>			Docket No. OGW-0311
In re Application of:    Shuichi Tsukada et al.			
Application No. 10/806,209-Conf. #1922	Filing Date March 23, 2004	Examiner J. R. Fischer	Group Art Unit 1733
Invention:    PNEUMATIC TIRE AND MANUFACTURING METHOD THEREOF			
<p style="text-align: center;"><b><u>TO THE COMMISSIONER OF PATENTS:</u></b></p> <p>Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed:    <u>November 28, 2006</u> .</p> <p>The fee for filing this Appeal Brief is    <u>\$ 500.00</u> .</p> <p><input checked="" type="checkbox"/> Large Entity                      <input type="checkbox"/> Small Entity</p> <p><input checked="" type="checkbox"/> A petition for extension of time is also enclosed.</p> <p>          The fee for the extension of time is    <u>\$ 120.00</u> .</p> <p><input type="checkbox"/> A check in the amount of                      is enclosed.</p> <p><input checked="" type="checkbox"/> Charge the amount of the fee to Deposit Account No.    <u>18-0013</u> .           This sheet is submitted in duplicate.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No.    <u>18-0013</u> .           This sheet is submitted in duplicate.</p> <div style="text-align: right; margin-top: 20px;"> <u>47,255</u></div> <div style="display: flex; justify-content: space-between;"><div>David T. Nikaido Attorney Reg. No. : 22,663 RADER, FISHMAN &amp; GRAUER PLLC 1233 20th Street, N.W. Suite 501 Washington, DC 20036 (202) 955-3750</div><div>Dated:    <u>February 28, 2007</u></div></div>			



Docket No.: OGW-0311  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Shuichi Tsukada et al.

Application No.: 10/806,209

Confirmation No.: 1922

Filed: March 23, 2004

Art Unit: 1733

For: PNEUMATIC TIRE AND MANUFACTURING  
METHOD THEREOF

Examiner: J. R. Fischer

**APPELLANT'S BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INTRODUCTORY COMMENTS**

This is an Appeal Brief under 37 C.F.R. §41.37 appealing the final decision of the Examiner dated August 28, 2006. Each of the topics required by 37 C.F.R. §41.37 is presented herewith and is labeled appropriately.

This brief is in furtherance of the Final Office Action on August 28, 2006.

A Notice of Appeal has been filed in this case on November 28, 2006.

A one-month extension has been filed along with the present Appeal Brief.

Accordingly, the Appeal Brief is timely. 37 C.F.R. §1.136.

03/01/2007 JADD01 00000092 100013 10006209  
01 FC:1402 500.00 DA

**I. REAL PARTY IN INTEREST**

The Yokohama Co. of Tokyo, Japan ("Yokohama") and Mitsubishi Jidosha Kogyo Kabushiki Kaisha of Tokyo, Japan ("Mitsubishi") is the real party in interest of the present application. An assignment of all rights in the present application to Yokohama and Mitsubishi was executed by the inventor and recorded by the U.S. Patent and Trademark Office at **Reel 004410, Frame 0748**.

**II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS**

Claims 1, 3-4 and 6-7 are present in the above-identified application, with claims 1 and 4 being independent.

Within the Final Office Action of August 28, 2006:

Paragraph 2 of the Final Office Action includes a rejection of claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiwara or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.

Paragraph 3 of the Office Action indicates that claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiwara, Numata,

Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).

Thus, the status of the claims is as follows:

Claim 1: (Rejected)

Claim 2: (Canceled)

Claims 3-4: (Rejected)

Claim 5: (Canceled)

Claim 6: (Rejected)

Claim 7: (No Rejection)

No rejection of claim 7 is found within the Final Office Action. Accordingly, claim 7 is deemed to contain allowable subject matter.

Accordingly, Appellant hereby appeals the final rejection of claims 1, 3-4 and 6 which are presented in the Claims Appendix.

#### **IV. STATUS OF AMENDMENTS**

No Amendment has been filed subsequent to the final rejection of August 28, 2006.

#### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The following description is provided for illustrative purposes and is not intended to limit the scope of the invention.

The present invention relates to a pneumatic tire in which a sectional shape of a closed space formed between a tire and a wheel is changed in a tire circumferential direction, and a manufacturing method thereof. More particularly, the present invention relates to a pneumatic tire designed to solve problems which occur when a sectional shape of a closed space is changed in a tire circumferential direction, and a manufacturing method thereof.

**Claims 1 and 3 stand or fall together** - Claim 3 is dependent upon claim 1. Claim 1 is drawn to a pneumatic tire, comprising:

a carcass layer (4) arranged between a pair of left and right bead portions (3) (Specification Figure 1); and

an inner liner layer (5) provided on an inner side of the carcass layer (4) (Specification Figure 1),

wherein volume adjusting members (9) are intermittently arranged between the carcass layer (4) and the inner layer (5) in the bead portions (3) in a tire circumferential direction so as to change a sectional shape of a closed space (8) formed between the tire and a wheel in the tire circumferential direction (Specification paragraph [0016]), and

wherein the volume adjusting members (9) are arranged at equal intervals in the tire circumferential direction (Specification Figure 3, paragraph [0016]).

**Claims 4 and 6 stand or fall together** - Claim 6 is dependent upon claim 4. Claim 4 is drawn to a method for manufacturing a pneumatic tire, comprising the steps of:

intermittently crimping volume adjusting members (9) on both side sections of a sheet inner liner material (15) in a longitudinal direction thereof beforehand (Specification Figure 3, paragraph [0020]);

winding the inner liner material (15) on an outer peripheral side of a forming drum (D) (Specification Figure 4, paragraphs [0019]-[0021]);

winding a sheet carcass material (14) on an outer peripheral side of the inner liner material (15) (Specification Figure 4, paragraphs [0019]-[0021]);

forming an unvulcanized tire (10) containing the inner liner material (15) and the carcass material (14) (Specification Figure 4, paragraphs [0019]-[0021]); and

vulcanizing the unvulcanized tire (10) (Specification Figure 4, paragraphs [0019]-[0021]);

wherein the volume adjusting members (9) are intermittently arranged in a tire circumferential direction between the inner liner material (15) and the carcass material (14) (Specification Figure 4, paragraphs [0019]-[0021]).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The issues presented for consideration in this appeal are as follows:

Whether the Examiner erred in rejecting claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiwara or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.

Whether the Examiner erred in rejecting claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiwara, Numata, Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).

These issues will be discussed hereinbelow.

## VII. ARGUMENT

In the Final Office Action of August 28, 2006:

The Examiner erred in rejecting claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiware or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.

The Examiner erred in rejecting claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiware, Numata, Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).

The arguments set forth in the following section provide reasons why these claims are considered patentable, 37 C.F.R. §41.37(c)(1)(vii). For at least the following reasons, Appellant submits that these rejections are both technically and legally unsound and should therefore be reversed.

**The Examiner erred in rejecting claims 1-3 under 35 U.S.C. §103 as allegedly being unpatentable over Japanese Application Publication No. 03-193510 to Kajiware or Japanese Application Publication No. 11-170824 to Numata in view of Japanese Application Publication No. 2001-113902 to Akiyoshi et al. (Akiyoshi), U.S. Patent No. 4,034,792 to Martin, U.S. Patent No. 4,343,342 to McDonald, U.S. Patent No. 6,418,993 to Sakamoto et al. (Sakamoto), and U.S. Patent No. 6,536,368 to Hendrie.**

This rejection is traversed at least for the following reasons.

**Claim 2 stand or falls separately** - While paragraph 2 of the Final Office Action indicates a rejection of claim 2, claim 2 has been previously canceled by the Amendment in Response to Non-Final Office Action filed on of June 22, 2006.

**Claims 1 and 3 stand or fall together** - Claim 3 is dependent upon claim 1. Claim 1 is drawn to a pneumatic tire, comprising:

a carcass layer arranged between a pair of left and right bead portions; and

an inner liner layer provided on an inner side of the carcass layer,

wherein volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction, and

wherein the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

**Kajiwara** - Kajiwara arguably teaches the presence of a reinforcement layer 9 (Kajiwara at Figures 1, and 2).

However, the Final Office Action admits that Kajiwara fails to disclose, teach or suggest the reinforcement layer 9 being intermittently arranged (Final Office Action at page 2).

Thus, Kajiwara fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

Moreover, Kajiwara is also silent as to the reinforcement layer 9 being arranged at equal intervals in the tire circumferential direction.



Thus, Kajiwara fails to disclose, teach or suggest that the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

Numata - Numata arguably teaches the presence of a reinforcement layer 21 (Kajiwara at Figures 1, 2, and 5).

However, the Final Office Action admits that Numata fails to disclose, teach or suggest the reinforcement layer 21 being intermittently arranged (Final Office Action at page 2).

Thus, Numata fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

Moreover, Numata is also silent as to the reinforcement layer 21 being arranged at equal intervals in the tire circumferential direction.

Thus, Numata fails to disclose, teach or suggest that the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

Akiyoshi - Akiyoshi arguably teaches a wheel structure for a vehicle that includes a bulk-head 15" (Akiyoshi at Figures 9(a) and 9(b)).

Within claim 1, the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

In this regard, it is well established under U.S. patent practice and procedures that drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes *if the specification is completely silent* on the issue. *Hockerson-Halberstadt Inc. v. Avia Group International Inc.*, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000). See M.P.E.P. §2125 (proportions of features in a drawing are not evidence of actual proportions when drawings are not drawn to scale).

Moreover, arguments based on the measurement of a drawing are of little value absent any written description in the specification of the quantitative values allegedly shown within the drawings. *In re Wright*, 569 F.2d 1124, 1127, 193 USPQ 332, 335 (CCPA 1977).

Here, the Office Action fails to identify any written description in the specification of Akiyoshi to show that the bulk-head 15” is arranged at equal intervals in the tire circumferential direction.

Thus, Akiyoshi fails to disclose, teach or suggest that the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

Martin - Martin arguably teaches a pneumatic tire having beads 11, a rib 12, and a carcass 13 (Martin at Figures 1-6).

However, Martin fails to disclose, teach or suggest the rib 12 as being intermittently arranged.

In addition, Martin fails to disclose, teach or suggest the rib 12 as being between the carcass 13 and an inner layer in the bead 11.

Thus, Martin fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

McDonald - McDonald arguably teaches a pair of predetermined angularly-spaced substantially radial projections 34 bridging annular band 36 and connecting projections 30 and 32 (McDonald at Figure 1).

However, McDonald fails to disclose, teach or suggest any of the projections 30, 32 and 34 as being between the carcass layer and the inner layer.

Although McDonald arguably teaches pluralities of modules 52 or 54 (McDonald at Figures 8 and 9), McDonald fails to disclose, teach or suggest any of the modules 52 or 54 as being between the carcass layer and the inner layer.

Thus, McDonald fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

Sakamoto - Sakamoto arguably teaches the presence of a wheelrim protector 9 (Sakamoto at Figures).

However, Sakamoto fails to disclose, teach or suggest the wheelrim protector 9 as being intermittently arranged.

In addition, Sakamoto fails to disclose, teach or suggest the wheelrim protector 9 as being between the carcass layer and the inner layer.

Thus, Sakamoto fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

Hendrie - Hendrie arguably teaches the presence of grooves 30, 32 (Hendrie at Figure 11).

However, Hendrie fails to disclose, teach or suggest the grooves 30, 32 as being between the carcass layer and the inner layer.

Thus, Hendrie fails to disclose, teach or suggest that volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction.

**Motivation** - The Final Office Action contends that it is emphasized that the concept of forming tire layers in a discontinuous manner is extremely well known and conventional in the tire industry and as such, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate such a design in either Kajiware or Numata depending on the desired distribution of reinforcement (Office Action at pages 2-3).

In response to this contention, the fact that the claimed invention is within the capabilities of one of ordinary skill in the art *is not sufficient* by itself to establish *prima facie* obviousness. M.P.E.P. §2143.01(IV). Moreover, the fact that references can be combined or modified *is not sufficient* to establish *prima facie* obviousness. M.P.E.P. §2143.01(III).

But the assertions made within the Office Action fail to provide objective evidence sufficient to show that the skilled artisan would have been motivated to rely upon the teachings of Martin, McDonald, Sakamoto, or Hendrie to modify either the reinforcement layer 9 of Kajiware or the reinforcement layer 21 of Numata. The lack of objective evidence especially apparent when taking into consideration that a structure that is substantially similar to either the reinforcement layer 9 of Kajiware or the reinforcement layer 21 of Numata is absent from within Martin, McDonald, Sakamoto, and Hendrie. M.P.E.P. §2144.06.

Although Martin, McDonald, Sakamoto and Hendrie quite possibly may be tire forming members intermittently arranged, the Final Office Action has fails to show that the reinforcing layer 9 of Kajiware and reinforcing layer 21 of Numata would also be intermittently arranged.

Furthermore, the noise reducing system according to Akiyoshi and the system according to Kajiware completely differ from each other, so that it is unreasonable to combine Akiyoshi and Kajiware together.

Therefore, there does not lie a reasonable motivation to that, in Kajiware and Numata, the reinforcing members are arranged in a discontinuous way.

**Unexpected results** - The Office Action contends that no showing of unexpected results has been provided (Office Action at page 3)

In response to this contention, paragraphs [0024]-[0035] provide a showing of unexpected results.

Concerning the experimental data in the present application, now that Kajiwara is for reducing road noise and is not for reducing noise due to resonance phenomena, such Kajiawara cannot be regarded as closest prior art.

The Final Office Action contends that the closest prior art is not based on solving similar problems but rather is dependent on the similarities between respective tire constructions (Final Office Action at page 6).

In response to this contention, neither Kajiwara nor Numata resemble the claimed invention structurally in that in Kajiwara and Numata reinforcing members are arranged continuously in the tire circumferential direction.

Also, the structure in which reinforcing members in Kajiwara and Numata are in a discontinuous arrangement is not derivable from a combination of cited references.

Thus, the experimental data shown in Table 2 of the present application is appropriate.

**The Examiner erred in rejecting claims 4 and 6 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Kajiwara, Numata, Akiyoshi, Martin, McDonald, Sakamoto, and Hendrie, and in further view of Japanese Application Publication No. 02-106330 to Yamada et al. (Yamada).**

This rejection is traversed at least for the following reasons.

**Claims 4 and 6 stand or fall together** - Claim 6 is dependent upon claim 4. Claim 4 is drawn to a method for manufacturing a pneumatic tire, comprising the steps of:

intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand;

winding the inner liner material on an outer peripheral side of a forming drum;

winding a sheet carcass material on an outer peripheral side of the inner liner material;

forming an unvulcanized tire containing the inner liner material and the carcass material; and

vulcanizing the unvulcanized tire,

wherein the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

**Kajiwara and Numata** - The Final Office Action *admits* that Kajiwara and Numata are *silent* as to the specific tire manufacturing method (Final Office Action at page 4).

**Akiyoshi** - **Akiyoshi** arguably teaches a wheel structure for a vehicle that includes a bulk-head 15" (Akiyoshi at Figures 9(a) and 9(b)).

However, **Akiyoshi** fails to disclose, teach or suggest the step of *intermittently crimping volume adjusting members* on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

**Akiyoshi** fails to disclose, teach or suggest the step of *winding the inner liner material* on an outer peripheral side of a forming drum.

**Akiyoshi** fails to disclose, teach or suggest the step of *winding a sheet carcass material* on an outer peripheral side of the inner liner material.

**Akiyoshi** fails to disclose, teach or suggest the step of *forming an unvulcanized tire* containing the inner liner material and the carcass material.

Akiyoshi fails to disclose, teach or suggest the step of vulcanizing the unvulcanized tire.

Akiyoshi fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

Martin - Martin arguably teaches a pneumatic tire having beads 11, a rib 12, and a carcass 13 (Martin at Figures 1-6).

Referring now more particularly to FIG. 1 of the drawings a pneumatic tire 10 in accordance with the invention adapted to be mounted on a rim having two flanges against which the beads of the tire are seated comprises beads 11 preferably having inextensible bead wire assemblies 11a incorporated in a carcass 13 of a plurality of plies of rubberized tire cord fabric having an inner air-impervious liner adherent thereto and preferably having a reinforcing belt (not shown) surrounding the carcass under the tread (Martin at column 2, lines 16-26).

However, Martin fails to disclose, teach or suggest the step of intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

Martin fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

Martin fails to disclose, teach or suggest the step of winding a sheet carcass material on an outer peripheral side of the inner liner material.

Martin fails to disclose, teach or suggest the step of forming an unvulcanized tire containing the inner liner material and the carcass material.

Martin fails to disclose, teach or suggest the step of vulcanizing the unvulcanized tire.

Martin fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

McDonald - McDonald arguably teaches a pair of predetermined angularly-spaced substantially radial projections 34 bridging annular band 36 and connecting projections 30 and 32 (McDonald at Figure 1).

However, McDonald fails to disclose, teach or suggest the step of intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

McDonald fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

McDonald fails to disclose, teach or suggest the step of winding a sheet carcass material on an outer peripheral side of the inner liner material.

McDonald fails to disclose, teach or suggest the step of forming an unvulcanized tire containing the inner liner material and the carcass material.

McDonald fails to disclose, teach or suggest the step of vulcanizing the unvulcanized tire.

McDonald fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

Sakamoto - Sakamoto arguably teaches the presence of a wheelrim protector 9 (Sakamoto at Figures).

Sakamoto arguably teaches the presence of a carcass 6 (Sakamoto at Figure 2).

However, Sakamoto fails to disclose, teach, or suggest a sheet inner liner material.



Moreover, Sakamoto fails to disclose, teach or suggest the step of intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

Sakamoto fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

Sakamoto fails to disclose, teach or suggest the step of winding a sheet carcass material on an outer peripheral side of the inner liner material.

Sakamoto fails to disclose, teach or suggest the step of forming an unvulcanized tire containing the inner liner material and the carcass material.

Sakamoto fails to disclose, teach or suggest the step of vulcanizing the unvulcanized tire.

Sakamoto fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

Hendrie - Hendrie arguably teaches the presence of grooves 30, 32 (Hendrie at Figure 11).

However, Hendrie fails to disclose, teach or suggest the grooves 30, 32 as being between the carcass layer and the inner layer.

Moreover, Hendrie fails to disclose, teach or suggest the step of intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

Hendrie fails to disclose, teach or suggest the step of winding the inner liner material on an outer peripheral side of a forming drum.

Hendrie fails to disclose, teach or suggest the step of winding a sheet carcass material on an outer peripheral side of the inner liner material.

Hendrie fails to disclose, teach or suggest the step of forming an unvulcanized tire containing the inner liner material and the carcass material.

Hendrie fails to disclose, teach or suggest the step of vulcanizing the unvulcanized tire.

Hendrie fails to disclose, teach or suggest that the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

Yamada - Yamada arguably teaches the manufacture of a carcass of a pneumatic tire.

In particular, Yamada arguably teaches that when a rubber-coating cord stripe 9 to be filled in the turnup ply of a carcass 1 is wound on a case band forming drum 10 in a step of forming a case band, a rubber sheet 11 to become a squeegee rubber 8 is disposed from a position opposed to the turnup end of ply to an outside, or integrally applied in case of connecting the stripe 9 prior to the winding to form the case band (Yamada at Abstract).

Whereas Yamada arguably teaches a carcass 1 is wound on a case band forming drum 10, the Office Action fails to show where within Yamada that there is to be formed the step of intermittently crimping volume adjusting members on both side sections of a *sheet inner liner material* in a longitudinal direction thereof beforehand.

Figures 2 and 3 of Yamada arguably teach the presence of a drum 10, a stripe 9, and a rubber sheet 11. However, Figures 2 and 3 of Yamada fail to disclose, teach, or suggest the presence of an inter liner material.

Figure 1 of Yamada arguably teaches the presence of a carcass 1. The Abstract of Yamada arguably teaches the rubber sheet 11 (Yamada at Figures 2 and 3) that is to become a squeegee rubber 8 (Yamada at Figure 1).

However, Yamada fails to disclose, teach, or suggest that the squeegee rubber 8 is between an inner liner material and the carcass 1.

Yamada also fails to disclose, teach or suggest the rubber sheet 11 as being intermittently crimped.

Thus, Yamada fails to disclose, teach, or suggest the step of intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand.

### **Conclusion**

The claims are considered allowable for the same reasons discussed above, as well as for the additional features they recite.

Reversal of the Examiner's decision is respectfully requested.

Dated: February 28, 2007

Respectfully submitted,

By 

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**CLAIMS APPENDIX**

1. (Previously presented) A pneumatic tire, comprising:

a carcass layer arranged between a pair of left and right bead portions; and

an inner liner layer provided on an inner side of the carcass layer,

wherein volume adjusting members are intermittently arranged between the carcass layer and the inner layer in the bead portions in a tire circumferential direction so as to change a sectional shape of a closed space formed between the tire and a wheel in the tire circumferential direction, and

wherein the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

2. (Canceled)

3. (Original) The pneumatic tire according to claim 1, wherein the volume adjusting members are made of rubber compositions and set in a range from 1 mm to 10 mm in thickness.

4. (Previously presented) A method for manufacturing a pneumatic tire, comprising the steps of:

intermittently crimping volume adjusting members on both side sections of a sheet inner liner material in a longitudinal direction thereof beforehand;

winding the inner liner material on an outer peripheral side of a forming drum;

winding a sheet carcass material on an outer peripheral side of the inner liner material;

forming an unvulcanized tire containing the inner liner material and the carcass material; and

vulcanizing the unvulcanized tire,

wherein the volume adjusting members are intermittently arranged in a tire circumferential direction between the inner liner material and the carcass material.

5. (Canceled)

6. (Original) The method for manufacturing a pneumatic tire according to claim 4, wherein the volume adjusting members are made of rubber compositions and set in a range from 1 mm to 10 mm in thickness.

7. (Previously presented) The method for manufacturing a pneumatic tire according to claim 4, wherein the volume adjusting members are arranged at equal intervals in the tire circumferential direction.

**EVIDENCE APPENDIX**

There is no other evidence that will directly affect or have a bearing on the Board's decision in this appeal.

**RELATED PROCEEDINGS APPENDIX**

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.